WORKMAN, NYDEGGER & SEELEY<sup>†††\*</sup> for the first of the fir

1. A method of frame rate buffering comprising:

providing a source of compressed video which generates a compressed video stream having a variable frame rate;

providing a video display unit which receives said compressed video frames, decompresses said video frames and displays said video frames, wherein said unit is constrained to a fixed frame rate; and

padding said generated compressed video frames with frames which indicate that no change has occurred, to achieve said fixed frame rate.

- 2. A method according to claim 1, comprising, increasing said padding and decreasing said variable rate, to compensate for bandwidth limitation in transmission between said source and said display unit.
- 3. A method according to claim 1, comprising, increasing said padding and decreasing said variable rate, to compensate for an instantaneous resource limitation at said source.

ATIORNEYS AI LAW 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UTAH 84111 4. A method of bandwidth allocation for a compressed video stream, comprising: generating a plurality of display commands, by executing a computer program; converting said display commands into a compressed video stream; estimating a future content of said video stream; and allocating bandwidth resources responsive to said estimate.

- Page 84 -

Docket No. 14531.107.1J

- 5. A method of bandwidth allocation for a compressed video stream, comprising: generating a plurality of display commands, by executing a computer program; converting said display commands into a compressed video stream; estimating a future content of said video stream; and allocating CPU resources for compression responsive to said estimate.
- 6. A method according to claim 4 or claim 5, wherein said program comprises a WWW browser.
- A method according to claim 6, wherein estimating comprises identifying a future 7. download of complex display data.
- 8. A method according to claim 6, wherein estimating comprises identifying a future download of a continuous data stream.

9. A method of bandwidth allocation for transmitting video on a cable network, comprising:

providing a plurality of data sources;

differentially converting said data sources into compressed video streams, responsive to an instantaneous resource restriction; and

multiplexing said compressed video streams on a single transmission line.

- 10. A method according to claim 9, wherein said differentially converting comprises converting each data source to a different frame rate compressed video stream.
- 11. A method according to claim 9, wherein said differentially converting comprises, converting each data source to a different frame quality level.
- 12. A method according to claim 9, wherein said resource restriction comprises a bandwidth restriction.
- 13. A method according to claim 9, wherein said resource restriction comprises a computing resource restriction.
- 14. A method according to any of claims 9-13, wherein said data sources comprise display commands.
- 15. A method according to any of claims 9-13, wherein said differentially converting comprises differentially converting responsive to a content of said data sources.
- 16. A method according to claim 15, comprising providing an indication of said content with said data sources.
- 17. A method according to claim 15, comprising providing an indication of said content by analyzing display commands which are comprised in said data sources.

18. A method according to claim 15, comprising providing an indication of said content by a software which generates at least one of said data sources.

- Page 87 -

Docket No. 14531.107.1J

19. A method of bandwidth allocation, comprising: providing a distribution network having a bandwidth; transmitting on said network a plurality of channels, comprising Internet channels and TV channels; and

dynamically allocating bandwidth between Internet channels and TV channels.

20. A method of statistical bit multiplexing, comprising: providing a plurality of compressed video streams to be multiplexed; providing, for at least one of said plurality of streams, side information, indicative

of a content of a frame of said stream; and

differentially dropping bits from said at least one of plurality of streams, responsive to said side information.

21. A method according to claim 20, wherein said side information includes a minimal quality level for said frame.

- Page 89 - Docket No. 14531.107.1J